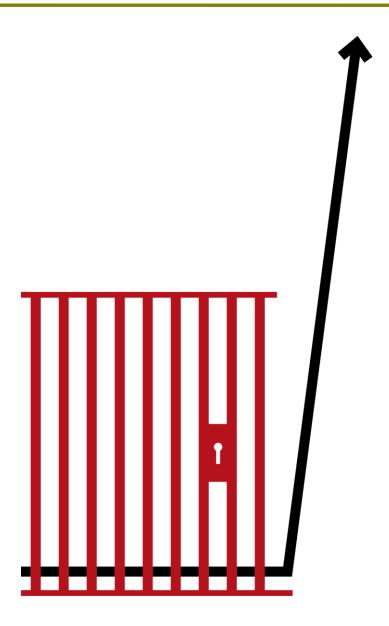
Economic Benefits of Employing Formerly Incarcerated Individuals in Philadelphia

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Economic Benefits of Employing Formerly Incarcerated Individuals in Philadelphia

As part of its efforts to increase public safety, reduce recidivism, and decrease public spending on criminal justice functions, the City of Philadelphia has joined a growing number of local and state governments focused on connecting formerly incarcerated individuals with employment. The rationale backed by an emerging research literature - is that former inmates are less likely to commit crimes causing them to return to prison if they become gainfully employed. In addition to the social benefits to be derived from reduced crime, there are significant positive economic impacts associated with employing the formerly incarcerated, including increased earnings for former inmates, increased tax revenues from employment, and avoided costs in the form of spending on criminal justice agencies.

These economic benefits of employing the formerly incarcerated are understood in theory, but a more precise understanding of their value has been lacking from policy debates and in reentry advocates' conversations with the business, civic, and government partners necessary to make prisoner reintegration a success. In the interest of gaining a better understanding of the economic and fiscal benefits associated with employing the formerly incarcerated in Philadelphia, the City's Office of the Deputy Mayor for Public Safety requested the following independent analysis conducted by the Economy League of Greater Philadelphia.

AN OVERVIEW OF THE FORMERLY INCARCERATED POPULATION IN PHILADELPHIA

Current estimates indicate that there are approximately 40,000 releases of inmates annually from federal and state prisons and local jails back into Philadelphia. This has led to a population of 50,000 adults on active probation or parole living in the city. These staggering numbers are the result of several decades-long trends, including the advent of more effective and aggressive policing, prosecution, and sentencing starting in the 1970s; tougher drug laws and a more punitive approach to post-release supervision starting in the 1980s; and the deterioration of urban labor markets for the less skilled (Western 2006).

These dynamics have contributed to current levels of mass incarceration, with more than 2.3 million inmates under federal, state and local jurisdiction as of June 2009 (West 2010, Minton 2010) and an estimated 5 million individuals on probation and parole (Schmitt and Warner 2010). Among those who are incarcerated, 97 percent will leave prison at some point, resulting in between 12 and 14 million former inmates of working age in the US (Schmitt and Warner 2010).

These incarceration levels come at enormous cost to taxpayers, crime victims, the incarcerated, and their families. From a public spending standpoint, in fiscal year 2010 the

¹ Interview with Keri Salerno, July 8, 2011. The total number of individuals released annually from prisons and jails to Philadelphia is less than 40,000, due to recidivists who are arrested and released more than once.

Pennsylvania Department of Corrections spent \$1.8 billion to operate 27 prisons with more than 51,000 inmates (Office of the Pennsylvania Auditor General 2011), while the City spent \$234 million, or approximately 6 percent of its general budget, on prisons.² Among the 50 US counties and cities with the most inmates, Philadelphia's inmate population stands at fifth highest in the country on a per capita basis. In recent years, however, a declining local jail population down from a peak of 9,400 in 2008 (Pew Charitable Trusts 2011b) to 7,900 as of May 2011³ - has tempered what had been significant growth in Philadelphia's prisons budget. The City of Philadelphia projects that its annual spending on prisons will hold steady at \$231 million through 2016 (City of Philadelphia 2011), while the number of inmates at state prisons is projected to rise to 61,000 by 2014 (Dean 2011).

As incarcerated and post-incarceration populations have grown over time, high recidivism rates - the rate at which the formerly incarcerated reoffend and return to prison – have further increased costs to both taxpayers and crime victims. Studies have estimated that two out of three former inmates are rearrested and four out of 10 are reincarcerated within three years of their release (Pew Charitable Trusts 2011, Langan and Levin 2002). Recent research by the Pew Center on the States examined recidivism rates by state, with Pennsylvania close to the national reincarceration rate. For Pennsylvania prisoners released in 1999, 37 percent were reincarcerated within three years, compared to 40 percent for 2004 releasees. Most recidivism occurs within the

first year post-release, with approximately half of recidivists returning to prison for new crimes and half returning due to technical parole or probation violations. Pennsylvania has a higher share of the formerly incarcerated returning to prison due to supervision violations than the national average, with approximately 60 percent of recidivists reincarcerated for violations of probation or parole (Pew Charitable Trusts 2011).

Looking at recidivism in Philadelphia, a 2006 Urban Institute study found a total of 241,000 instances of individuals being admitted and subsequently released from the Philadelphia Prison System between 1996 and 2003. However, over this eight-year period, only 107,000 different persons were incarcerated and released, with half (54,000) incarcerated and released multiple times (3.5 times on average). These recidivists accounted for almost 80 percent of all releases during the study period (Roman, Kane, Turner and Frazier 2006).

As the economic and social challenges associated with expanding former inmate populations and corrections systems grow, efforts to reduce recidivism have gained increased attention. Philadelphia has focused on this as a priority, with Mayor Michael A. Nutter recently retooling the City's exoffender agency into the Mayor's Office of Reintegration Services for Ex-Offenders (RISE) and making it the lead entity in Philadelphia for this population. RISE's strategy is to operate under a Managed Reintegration Network, which builds partnerships with nonprofit and for-profit providers to coordinate services, build capacity, and ensure consistent quality services are received by former inmates during their reintegration into the workforce and community.

² Philadelphia's detention facilities, while often referred to as prisons, are technically jails, or local institutions that house people waiting for trial or convicted of minor crimes. In contrast, state and federal prisons are for longer-term confinement of individuals convicted of more serious crimes.

 $^{3\,}$ Interview with Marco Giannetta, May 26, 2011.

Amid these and other recidivism reduction efforts, research has emphasized the importance of employing the previously incarcerated in decreasing criminal activity and lowering the chances that former inmates are reincarcerated. Stable, supervised work can provide a daily routine that eliminates the idleness that sets the stage for committing crimes (Western 2006). Individuals with an employment history prior to incarceration are less likely to recidivate, with one study finding that individuals employed or attending school full-time before entering prison have a recidivism rate of 26 percent compared to 60 percent for those not so engaged. Evaluations of employment programs for the formerly incarcerated, such as New York City's Center for Employment Opportunities (CEO), indicate that immediate engagement in structured programs connecting recent inmates with work can reduce the likelihood of returning to prison (MDRC 2009).

BARRIERS TO EMPLOYMENT FOR THE FORMERLY INCARCERATED

Several barriers exist in connecting formerly incarcerated individuals to employment. These challenges center around former inmates' education levels, skills, and work experience; weakened social networks to access job opportunities; and employer willingness to hire.⁴

Work Readiness

In general, previously incarcerated individuals have low education and literacy levels compared to the general population. Frequently underlying these low education levels for former inmates are cognitive deficits. Among male high school dropouts,

prison inmates have been found to score 20 to 50 percent lower on the Armed Forces Qualification Test, a standard exam assessing math and verbal abilities, than those who have never been incarcerated (Western 2006). Behavioral, substance abuse, and other physical or mental health problems also can contribute to the formerly incarcerated being out of work, with a disproportionate share of inmates having mental or physical impairments or drug and alcohol dependencies that hinder their ability to acquire and keep a job (Freeman 2003). Furthermore, limited or erratic work histories put former inmates at a disadvantage compared to individuals with similar characteristics but who do not have a record. Given the educational and work experience that most former inmates bring to the job market, their employment prospects would be threatened even in the absence of a record (Western 2006).

Eroded Social Networks

Another major barrier to employment for former inmates centers on the impact of incarceration on social networks. Research has emphasized the importance of social and referral networks in learning about and obtaining employment (Granovetter 1995). However, incarceration can erode the existing web of personal and social connections that help lead to job opportunities and referrals. Often the social ties that do remain for former inmates draw upon prison relationships or prior criminal activity, increasing the chances of illicit earnings or recidivism. For individuals who enter prison with lower levels of human and social capital, incarceration can undermine the acquisition of both, further deepening their disadvantages in the labor market (Western 2006).

Employer Reluctance to Hire

A significant set of barriers to employment for the formerly incarcerated exist around

⁴ Leading examinations of barriers to former inmate employment include Western 2006, Coley and Barton 2006, Holzer et al 2003a, and Holzer et al 2003b.

employer willingness to hire and stigmas associated with having a record. Increased use and depth of background checks in hiring processes make employers aware of the full extent of an applicant's interactions with the criminal justice system. Some industries, such as banking, are legally off-limits to former inmates due to federal regulations. Employer hesitance or reluctance to consider hiring the previously incarcerated in general or in specific cases can arise due to concerns about skills, reliability, and legal or financial liabilities (Holzer et al 2003b). Employer surveys have revealed greater willingness to consider hiring welfare recipients and high school dropouts than former inmates (Holzer 1996). This hiring reluctance is exacerbated by the trend of limited or negative growth in industries that historically have been most likely to hire formerly incarcerated individuals, such as construction and manufacturing or those with minimal customer contact (Holzer et al 2003b).

While many former inmates actively engage in job searches and training upon release, these and other barriers can negatively impact incentive to seek legitimate employment. Years or even decades of disconnection from employment while incarcerated can discourage potential job seekers. Recently released individuals often need to satisfy debts, pay restitution, or make child support payments on top of food, clothing, and housing expenses and need to earn money quickly. If unsuccessful in rapidly attaching to employment, immediate financial pressures can lead formerly incarcerated individuals to consider secondary labor markets or additional crimes. As a result of these employment barriers and financial pressures, many former inmates end up relegated to informal and temporary labor markets with little prospect for earnings growth (Western 2006).

THE PHILADELPHIA CHALLENGE

In addition to the barriers detailed above, previously incarcerated individuals in Philadelphia face two additional challenges in securing employment: lower educational attainment rates than other prison populations and intense competition for a limited and shrinking number of low-skilled jobs.

Low Educational Attainment Levels

Among prison populations, Philadelphia inmates have notably higher high school dropout rates than federal and state prison inmates. Philadelphia prison system data from 2003 found that 55 percent of inmates did not have a high school diploma or equivalent (Roman et al 2006), compared to 40 percent of inmates nationwide (Ewert and Wildhagen 2011, Wolf Harlow 2003) and 15 percent for the general US population. The share of inmates with high school diplomas or GEDs is roughly the same – 40 percent for Philadelphia and 38 percent nationally. But another big difference in educational attainment levels occurs around postsecondary experience, as 22 percent of inmates nationally have had some college coursework or a degree, compared to only 4 percent for inmates in Philadelphia and 56 percent for the general US population.

Intense Competition for a Limited Number of Low-Skilled Jobs

These low educational attainment levels for the formerly incarcerated in Philadelphia come up against the reality of a shrinking number of jobs that require no high school diploma (Holzer 1996). Upon release from prison, former inmates with limited education join an already large number of Philadelphians with low-level educational attainment. The following from Drexel University economist Paul Harrington's 2008 study of high school dropouts in Philadelphia articulates the challenges that individuals with low educational attainment face in the local labor market:

The job content of the city has changed over time such that employer requirements for workers with higher levels of educational attainment have increased sharply while the demand for workers with fewer years of schooling has fallen. These trends have exacerbated the economic misfortunes of dropout residents in the city. Unfortunately, these trends are expected to continue resulting in a continued deterioration of the labor market outcomes of the city's dropout residents and a further widening of gaps between the labor market outcomes of dropouts and their better-educated counterparts. (Harrington et al 2008)

SUCCESS FACTORS IN EMPLOYING THE FORMERLY INCARCERATED

With so many challenges and barriers to employment for former inmates, it is easy to become discouraged about job prospects for formerly incarcerated individuals. However, as the evaluation literature on employment programs for the previously incarcerated has grown, so has understanding of key success factors in connecting to jobs. In its assessment of the Center for Employment Opportunities program in New York City, the Vera Institute of Justice emphasizes motivation – both general willingness to work as well as being motivated by a specific opportunity or program – and reliability as crucial to positive employment outcomes, as well as having the right types of jobs. In a 2001 survey of reentry practitioners, the National Institute of Correction identified the most significant job retention factors as the former inmate's level of social and problem solving skills, matching jobs with skills and interests, and realistic work expectations (Houston 2001).

THE INCARCERATION EARNINGS DISCOUNT

Extensive research has explored the impacts of incarceration on employment and earnings, most notably the work of Harvard economist Bruce Western. Looking at pre-incarceration employment, more than two-thirds of male inmates were employed prior to entering prison and more than half were the primary source of financial support for their children (Western 2006). However, the unemployment rate for former inmates in urban areas one year after their release typically stands at around 60 percent.

At the most simple level, incarceration has been shown to reduce earnings and slow wage growth for the formerly incarcerated compared to those without prison records. Estimates of earning losses associated with incarceration tend to range between 10 to 40 percent (Western 2007). When statistically controlling for age, education, and geographic location, recent analysis by Western indicates that serving time reduces hourly wages on average by 11 percent, annual employment from 48 weeks to 39 weeks, and annual earnings from \$39,100 to \$23,500.5 Western estimates that by age 48 the typical former inmate will have earned \$179,000 less than if he had never been incarcerated (Pew Charitable Trusts 2010a). Employed former inmates have been shown to have flatter earnings trajectories than comparable employees who have not been incarcerated, with annual hourly wage growth reduced by approximately 30 percent for the previously incarcerated (Western 2006).

With both lower anticipated earnings and wage growth over time, incarceration clearly

⁵ Estimates derived by Bruce Western and Becky Pettit from regression analysis of National Longitudinal Survey of Youth data for men age 45 who live in the Northeastern US and have the average level of schooling for the sample and average probability of living in an urban area.

stands out as an economic turning point in the lives of former inmates with significant long-term negative impacts on earning mobility (Western 2002).

ECONOMIC BENEFITS OF EMPLOYING FORMERLY INCARCERATED INDIVIDUALS IN PHILADELPHIA

Connecting the formerly incarcerated to employment has been shown to reduce recidivism and results in three different types of positive economic impacts: 1) *increased earnings*, 2) *increased tax revenues* from employment, and 3) *avoided costs* in the form of avoided spending on criminal justice agencies, social services, and government cash transfers, as well as prevented victim costs. These benefits are understood in theory, but a more precise understanding of their value is often lacking from policy debates and in reentry advocates' conversations with the business and civic partners necessary to make reentry succeed.

The analysis that follows provides baseline estimates of some of the primary economic benefits associated with employment of previously incarcerated individuals. This includes estimates of earnings, tax revenues, and criminal justice agency cost savings. It is **not** meant to serve as a comprehensive estimation of all quantifiable benefits associated with former inmate employment or as a cost-benefit tool for assessing specific employment programs for the formerly incarcerated ⁶

In order to develop earnings, tax revenues, and cost savings estimates associated with employing the formerly incarcerated, the Economy League drew upon existing local data where available. In situations where such local data was not readily available – either at all or due to time and resource limitations – estimates and approaches from other studies in the criminal justice research literature were utilized. These estimation techniques are based on a variety of assumptions detailed below and represent conservative estimates of expected earnings, tax revenues, and cost savings values.

This analysis does not attempt to quantify several potentially substantial benefits associated with former inmate employment that prove difficult to measure or estimate, such as earnings effects on children of the previously incarcerated or victim cost savings due to reduced crime.

It is important to note that the economic benefits presented in this analysis are meant to serve as estimates, not exact values, associated with employing formerly incarcerated individuals. While approximates, they are based on defensible and conservative estimation methods and represent a vast improvement over the current lack of understanding about former inmate employment impacts.

Earnings

In deriving earnings estimates for formerly incarcerated individuals in Philadelphia, this analysis focuses on wage and employment outcomes by educational attainment level for City residents and then applies discounts associated with incarceration found in the current research literature. As noted above, economic research indicates that former inmates experience substantial wage and

⁶ The growing criminal justice program evaluation literature indicates that well-designed and integrated former inmate employment and education programs can yield positive returns on investment (Aos, Miller and Drake 2006; Roman and Chalfin 2006; Cowell, Lattimore and Roman 2009; Bloom 2006; Bushway 2003).

employment penalties compared to similar individuals without a criminal record.⁷

In his research on the economic impact of dropping out of high school in Philadelphia, Drexel University economist Paul Harrington estimated average hourly wages and annual hours worked for Philadelphia residents by educational attainment. Harrington's estimates were based on 2006 American Community Survey data for 18-to-64 year-old Philadelphia residents who reported that they were employed at least one week during the prior 12 months.8 The analysis adjusts Harrington's hourly wage estimates for inflation using the consumer price index for the Philadelphia metropolitan statistical area and then applies former inmate earnings discounts specified by Bruce Western and Becky Pettit in the 2010 Pew report Collateral Costs: Incarceration's Effect on Economic Mobility. The hourly wage discount associated with incarceration used for this analysis was 11 percent. Assuming a 2011 release from prison, this yields an average hourly wage for employed former inmates in Philadelphia of \$11.91 for high school dropouts, \$15.11 for those with high school diplomas or equivalent, \$16.93 for those with some college, and \$21.63 for those with bachelor's degrees.

Per Western and Pettit's recent analysis, an employment discount of 12 percent is applied to average hours employed to get average annual hours for employed former inmates by educational attainment level: 702 hours annually for dropouts, 1,055 for high school graduates, 1,274 for those with some college, and 1,514 for those holding a bachelor's degree. The 2011 hourly wage estimates are

then multiplied by number of hours worked to get annual average earnings for employed former inmates by educational attainment.

Based on educational attainment level and lower earnings associated with incarceration, employed former inmates in Philadelphia are expected to have the following average annual earnings⁹:

- \$8,400 for individuals with no high school diploma or equivalent;
- \$15,900 for individuals with a high school diploma or GED;
- \$21,600 for individuals with some college experience; and
- \$32,700 for individuals with a bachelors degree.

Table 1 compares estimated annual earnings by educational attainment level for employed Philadelphia residents and for formerly incarcerated individuals.

These estimated earnings for less educated former inmates are at levels that clearly make it difficult for them to get by given Philadelphia's cost of living. Fair market rents in Philadelphia for a one-bedroom apartment – \$900 for one month or \$10,800 for one year – exceed projected total annual earnings for a formerly incarcerated individual without a high school diploma.

⁷ Leading research on the negative economic impacts of incarceration on former inmate employment and earnings includes Pew Charitable Trusts 2010a, Western 2006, Western 2002, Waldfogel 1994, Freeman 1992, Kling 2006, Grogger 1995, Sabol 2007, and Schmitt and Warner 2010.

⁸ See Harrington, Khatiwada and Fogg 2008.

⁹ Using mean earnings estimates takes into account both former inmates who earn more than the average, as well as those who earn less. Strategic investments, policy reforms, and overall economic growth may help to raise these earnings over time, but challenging labor supply and demand conditions for the previously incarcerated have contributed to poor historic and current earnings outcomes (Western 2006, Holzer 1996).

TABLE 1

Estimated Average Annual Earnings for Employed Philadelphia Residents and Formerly Incarcerated Individuals

Educational Attainment Level	Philadelphia Resident Average Annual Earnings 2011	Employed Former Inmate Average Annual Earnings 2011	
No high school diploma	\$10,682	\$8,366	
High school diploma / GED	\$20,360	\$15,946	
1-3 years of college	\$27,548	\$21,575	
Bachelor's degree	\$41,796	\$32,735	

Sources: Harrington, Khatiwada and Fogg 2008; Economy League estimates

In considering how these annual earnings would be distributed among Philadelphia's former inmate population, previous analysis indicates that 55 percent of previously incarcerated individuals released from prison in Philadelphia are high school dropouts, 40 percent have a high school diploma or equivalent, 4 percent have some college experience, and one percent have a bachelors degree or higher (Roman, Kane, Turner and Frazier 2006). This means that the median or "typical" employed former inmate in Philadelphia would be someone without a high school credential earning less than \$9,000 per year.

In order to estimate post-release lifetime earnings, the analysis uses 30 years old as a typical release age from prison¹⁰ and annual earnings are calculated assuming employment over 35 years through age 64.¹¹ Earnings data over time indicate a strong correlation between wage growth and educational attainment levels, so the estimation model

incorporates lower growth rates for individuals with less education. Using noninflation-adjusted Census wage data from 1990 through 2008 to calculate average annual wage growth by educational attainment, annual wage growth rates of 2 percent for high school dropouts, 2.12 percent for high school graduates, 2.2 percent for those with some college, and 2.76 percent for those with a bachelor's degree are applied to the 2011 earnings estimates. 12 In addition to these annual wage growth rates, the analysis applies a 30 percent wage growth discount associated with incarceration (Western 2006). Average annual earnings by educational attainment for employed former inmates are then summed up from 2011 through 2045 for average post-release lifetime earnings estimates.

¹⁰ In the Urban Institute's 2006 examination of prisoner reentry in Philadelphia, Roman et al found the median release age over an eight year period for Philadelphia prisons to be 30 years old.

¹¹ Modeling for post-release earnings and tax revenues assumes steady employment over the 35-year period based on hours worked estimates for former inmates that take into account part-time employment and stretches without a job.

¹² Current Population Survey wage data from 1990-2008 indicated 1.79 percent average annual wage growth for individuals with less than a ninth grade education, 2.05 percent growth for those with some high school, 2.08 percent for individuals with some college, and 2.38 percent for those with an associate's degree. Using these ranges, the Economy League assumed 2 percent annual wage growth for individuals without a high school diploma and 2.2 percent growth for those with some postsecondary education but no bachelor's degree.

TABLE 2
Estimated Formerly Incarcerated Employment Earnings Impacts in Philadelphia

Educational Attainment Level	Employed Philadelphia Resident Avg. Hourly Wage 2011	Employed Former Inmate Avg. Hourly Wage 2011	Employed Philadelphia Resident Avg. Hours Worked 2011	Employed Former Inmate Avg. Hours Worked 2011	Employed Former Inmate Avg. Annual Earnings 2011	Employed Former Inmate Avg. Post- Release Lifetime Earnings
No high school diploma	\$13.39	\$11.91	798	702	\$8,366	\$374,567
High school diploma / GED	\$16.98	\$15.11	1,199	1,055	\$15,946	\$724,875
1-3 years of college	\$19.02	\$16.93	1,448	1,274	\$21,575	\$990,875
Bachelor's degree	\$24.30	\$21.63	1,720	1,514	\$32,735	\$1,615,986

Source: Economy League estimates

Former inmates in Philadelphia that maintain full-time employment post-release can expect to have average post-release lifetime earnings of:

- \$375,000 for individuals with no high school diploma or equivalent;
- \$725,000 for individuals with a high school diploma or GED;
- \$991,000 for individuals with some college experience; and
- \$1,616,000 for individuals with a bachelors degree.

Table 2 displays a summary of estimated former inmate earnings in Philadelphia.

It is possible to estimate the earnings of a larger pool of former inmates by applying anticipated earnings to the distribution of educational attainment levels among Philadelphia's prison inmate population. As stated earlier, 55 percent of Philadelphia prison inmates lack a high school credential, 40 percent have a high school diploma, 4 percent have some college experience, and 1 percent have a bachelor's degree. Given this educational attainment distribution among the formerly incarcerated in Philadelphia,

connecting a representative sample of 100 currently employed former inmates to employment would produce \$1,217,000 in annual earnings and \$55,200,000 in total post-release lifetime earnings.¹³

Philadelphia Reentry Employment Program (PREP)

To incentivize employment of previously incarcerated individuals, the City of Philadelphia has made available to employers a tax credit of up to \$10,000 per year per former inmate employed full-time through the Philadelphia Reentry Employment Program (PREP). While some employers have signed on to participate in the program, none have claimed the credit yet. The earnings analysis presented above indicates that low participation thus far could in part be due to the significant gap between expected wages for former inmates at low educational attainment and skills levels and the qualifying wage threshold for the tax credit.

¹³ While this earnings analysis focuses on direct benefits to former inmates, it is likely that the children of former inmates who successfully attach to employment and do not return to prison will experience even more significant long-term earnings and economic mobility benefits over time. An estimation of long-term economic benefits for children of former inmates is not included here, however, due to challenges associated with modeling these impacts.

In order to qualify for the PREP tax credit, employers must pay either 150 percent of the federal minimum wage (\$10.88 per hour) or compensation equal to that offered to other employees for the same type of position. In the latter case, this could be as low as the current minimum hourly wage of \$7.25. For full-time employment at 37.5 hours per week and 50 weeks per year, an employer would need to pay at least \$13,600 in annual wages to an employee at the minimum wage and at least \$20,400 for an employee making 150 percent of the minimum wage to qualify for the credit. The minimum length of former inmate employment required for an employer to claim a credit against its business privilege tax is six months, so an employer would need to pay a minimum of \$6,800 over six months to qualify.

When comparing these PREP wage requirements with the estimated average annual earnings of \$8,400 for a former inmate without a high school diploma (55 percent of the previously incarcerated released from prison in Philadelphia), a significant gap exists. This gap between what the local market bears for former inmate high school dropouts and the compensation level required for PREP stands at \$5,200 for former inmate high school dropouts earning the minimum wage and \$12,000 for those making 150 percent of minimum wage. This gap underscores the economic reality behind local employers' hesitance to hire the least educated formerly incarcerated in Philadelphia – even with a generous tax credit and the importance of raising former inmate education and skill levels.

revenue amounts. Starting with wage tax contributions, the following analysis applies the resident wage tax rates currently included in the City's five-year plan through 2016 and assumes that the 0.8 percent annual wage tax rate reduction planned for 2014 through 2016 continues through the year 2045.14

Table 3 presents estimated 2011 wage tax contributions for employed former inmates based on average annual earnings by educational attainment. These annual wage tax revenues are relatively modest, ranging from \$330 for previously incarcerated individuals with no high school diploma or equivalent to \$1,290 for those with a bachelor's degree. Assuming full-time employment from age 30 through 64, these earnings would result in \$12,900 in postrelease lifetime wage taxes collected for a high school dropout and \$55,600 for a former inmate with an undergraduate credential. Total lifetime wage tax collections for employed former inmates at each educational attainment level exceed the \$10,000 PREP tax credit amount paid by the City to employers for hiring a former inmate.

Connecting a representative sample of 100 unemployed formerly incarcerated individuals to employment would produce an additional \$47,800 in annual City wage tax revenues and \$1,900,000 in total post-release wage tax contributions over the employees' lifetimes.

City Wage and Sales Tax Revenues

Using earnings estimates for employed former inmates in Philadelphia, it is possible to derive associated City wage and sales tax

 $^{14\,}$ The City of Philadelphia's five-year financial plan for 2012 through 2016 assumes a 3.928% wage tax rate through 2013 that goes down to 3.8966% in $2014, \,3.8654\%$ in 2015, and 3.8364% in 2016 (City of Philadelphia 2011). Continuing the annual 0.8% reduction in the wage tax rate begun in 2014 through the year 2045 for modeling purposes would yield a 3.0932% rate in 2045.

TABLE 3
Estimated Formerly Incarcerated Employment Wage Tax Impacts in Philadelphia

Educational Attainment Level	Employed Former Inmate Average Annual Earnings 2011	Employed Former Inmate Average Annual Wage Tax Contributions 2011	Employed Former Inmate Average Post-Release Lifetime Wage Tax Contributions
No high school diploma	\$8,366	\$329	\$12,936
High school diploma / GED	\$15,946	\$626	\$25,017
1-3 years of college	\$21,575	\$847	\$34,182
Bachelor's degree	\$32,735	\$1,286	\$55,575

Source: Economy League estimates

To estimate sales tax contributions associated with employing the formerly incarcerated, the analysis draws upon Consumer Expenditure Survey data (US Bureau of Labor Statistics 2010) to determine spending on items subject to Pennsylvania sales tax for individuals at different income levels. These expenditure share estimates are then applied to the average annual earnings estimates established above to determine employmentrelated¹⁵ spending on taxable sales items. This spending is multiplied by the sales tax rate, which will be 8 percent (6 percent to the state, 2 percent to the City) through 2014 and is scheduled to go back to the previous 7 percent rate (6 percent to the state, 1 percent to the City) starting in 2015. Because sales tax revenues are distributed by formula to the City and the state, both total sales tax contributions and amounts going to the City

and Commonwealth, respectively, are presented below. 16

Table 4 displays employed former inmate annual and lifetime sales tax contributions by educational attainment for Philadelphia. Individual sales tax revenues associated with former inmate employment are relatively modest, with a high school graduate contributing \$250 in sales tax revenue in 2011 and \$10,000 over the course of a post-release work life. Connecting a representative sample of 100 currently unemployed formerly incarcerated individuals to employment would produce an additional \$19,100 in annual sales tax revenues and \$770,000 in total post-release lifetime sales tax revenues.

¹⁵ At lower income levels, actual retail spending is higher than individual earnings due to cash transfers and/or secondary market earnings (e.g., BLS Consumer Expenditures Survey data indicates that someone earning between \$5,000 and \$10,000 has average annual expenditures of \$18,000). The sales tax contribution estimates presented in this analysis represent the sales tax revenues generated from employment.

¹⁶ While consideration of other local and state taxes could yield additional revenues associated with former inmate employment, the analysis focused just on wage and sales taxes. Inclusion of other tax revenue sources was omitted either due to what are considered to be minimal impacts (e.g., the vast majority of former inmates earn less than the exemption threshold to pay state income taxes) or difficulties in modeling (e.g., accounting for graduated income rates for the federal income tax).

TABLE 4
Estimated Formerly Incarcerated Employment Sales Tax Impacts in Philadelphia

Educational Attainment Level	Employed Former Inmate Avg. Annual Total Sales Tax Contributions 2011	Employed Former Inmate Avg. Annual Sales Tax Contributions to PA 2011	Employed Former Inmate Avg. Annual Sales Tax Contributions to Philadelphia 2011	Employed Former Inmate Average Post- Release Lifetime Total Sales Tax Contributions	Employed Former Inmate Avg. Post-Release Lifetime Sales Tax Contributions in PA	Employed Former Inmate Avg. Post-Release Lifetime Sales Tax Contributions to Philadelphia
No high school diploma	\$129	\$97	\$32	\$5,126	\$4,337	\$789
High school diploma / GED	\$250	\$188	\$63	\$10,073	\$8,525	\$1,549
1-3 years of college	\$354	\$265	\$88	\$14,400	\$12,188	\$2,212
Bachelor's degree	\$579	\$434	\$145	\$25,297	\$21,428	\$3,869

Source: Economy League estimates

Cost Savings from Reduced Recidivism

With approximately 40,000 releases of exinmates who return to Philadelphia annually, it is expected that 40 percent of this population will be convicted of another crime and return to prison within three years (Pew Charitable Trusts 2011). This represents up to 16,000 individuals who will be reincarcerated out of each annual release of 40,000.17 Shrinking these recidivism numbers would have a significant economic impact – both in terms of benefits to taxpayers as well as to victims of crime. A 10 percent reduction in recidivism would represent 1,600 fewer individuals reincarcerated in the prison system, while a one percent reduction would represent 160 fewer inmates.

It is expected that reduced recidivism will lower costs for government agencies

overseeing law enforcement, courts, corrections, and post-release supervision. These reduced costs for arrests, court processing, incarceration, and probation and parole services, in addition to post-release health care and social services costs, can result in taxpayer benefits and potential budget savings. Reduced crime will also yield benefits in the form of lower victim costs, including tangible costs such as property loss and damage and health care and victim services, as well as intangible costs related to pain and suffering and lost productivity. Estimates of victim costs are not included in this analysis due to the more subjective nature of criminal victimization cost assessment.18

^{17 16,000} is the upper limit of the number of individuals estimated to recidivate within three years of release since a portion of the 40,000 annual releases are for repeat offenders who are arrested and released more than once.

¹⁸ Roman and Chalfin (2006) estimated that reentry programs must only reduce recidivism by less than two percent to offset the costs of reentry programming and that 70 percent of related cost savings would benefit the public while 30 percent would benefit the criminal justice system. This suggests that with the high social and taxpayer costs associated with recidivism, reentry programs need to reduce recidivism only slightly to achieve positive net economic benefits.

Efforts to obtain accurate estimates of taxpayer benefits from reduced recidivism face several challenges, including limited data availability, costs spread across multiple agencies, and the existence of multiple benefits that accrue to multiple parties (Cowell, Lattimore and Roman 2009). It is also important to note that estimated cost savings associated with reduced recidivism will not necessarily translate into actual budget savings, as agencies may use cost savings to fill existing gaps or to reduce high staffing or caseload ratios (Henrichson and Levshin 2011a).

The Need for a Marginal Cost Approach

In order to accurately measure cost savings from reduced recidivism, it is necessary to focus on the marginal cost of government operations. Marginal costs describe how the cost of an operation changes when workload levels change. Many criminal justice cost savings analyses, however, rely upon average cost data, which includes both marginal and fixed costs such as capital and facilities, administration, and program costs that typically do not change as workload changes. For example, a common method for deriving average cost estimates for prisons is to divide the total corrections budget by number of inmates. Using such an average cost approach can significantly overstate cost savings since fixed expenses do not change with relatively small changes in the inmate population. In the short run, most of the costs for jails and prisons are fixed and only some costs, such as for food or medical care, can be saved with small changes in inmate population. Significant prison cost savings can only be achieved through a large enough reduction in the number of inmates that corrections facilities reduce their capacity and personnel. For this reason, *marginal* costs are a much better measure of the cost savings that crime reduction can generate for relatively small

changes in inmate numbers (Henrichson and Levshin 2011b).

While recognition of the need to go beyond average cost techniques to more widespread use of marginal cost analysis has been longstanding (McDonald 1989), in-depth marginal cost approaches require significant resources and have been infrequently used. The leader in detailed development of marginal cost benefits for use in criminal justice program cost-benefit evaluations has been the Washington State Institute for Public Policy (Aos and Drake 2010; Aos, Miller and Drake 2006; Aos, Phipps, Barnoski and Lieb 2001). In the interest of fostering more accurate methods and estimates among policymakers and practitioners, the Vera Institute of Justice this year created a new Cost-Benefit Knowledge Bank for Criminal Justice that compiles resources on cost-benefit analytic techniques and research. 19

While resources for a comprehensive marginal cost approach to assess recidivism reduction cost savings were not available for this analysis, some savings estimates are provided below.

Cost Savings Estimates for Philadelphia

With limited resources for analysis, criminal justice cost estimation experts suggest that it is preferable to derive local cost estimates for corrections functions, as they tend to yield the largest cost savings benefits, while marginal cost estimates for police and courts can be derived from other studies as the benefits are much smaller and collecting local data can be very time consuming.²⁰

¹⁹ The Cost-Benefit Knowledge Bank for Criminal Justice website (http://cbkb.org) launched in April 2011.

²⁰ Interview with Vera Institute of Justice Senior Policy Analyst Christian Henrichson, May 20, 2011.

Police Cost Savings

When a formerly incarcerated individual recidivates, police resources are consumed in making arrests. As discussed previously, taking the entire annual police budget and dividing it by the number of total arrests in a given year and using this average cost would significantly overstate the amount of resources dedicated to one additional arrest. A marginal cost approach focused on police overtime for new arrest processing can more accurately indicate the cost associated with arresting a recidivist.

While such marginal cost per arrest data currently is not available for Philadelphia, detailed marginal cost analyses conducted elsewhere can help in generating a defensible ballpark estimate of police cost savings. Recent analyses in the states of North Carolina and Washington yielded marginal cost per arrest estimates of \$498 and \$670, respectively²¹, and to-be-released Vera Institute of Justice analysis of a major US Northeast city found a marginal cost of \$360 per arrest. Based on these analyses and the assumption that costs per arrest would be higher for states than for cities with higher arrest rates, an average marginal cost of \$400 per arrest is estimated for Philadelphia. Assuming one arrest per recidivist, reducing the number of recidivists in Philadelphia by 100 would represent a cost savings of \$40,000 per year for the police department.

Court Cost Savings

A recidivating former inmate also incurs a variety of court processing and trial costs. While court costs vary significantly for the prosecution of different types of cases, recent detailed assessments in North Carolina and

Oregon have found average marginal cost per case values of \$657 and \$714, respectively (Henrichson and Levshin 2011a; Finigan, Carey and Cox 2007). 22 Based on these analyses, an average marginal cost for court processing per offender of \$700 is assumed for Philadelphia. Under this assumption, reducing the number of recidivists in Philadelphia by 100 would result in \$70,000 in annual cost savings for the court system.

Corrections Cost Savings

Average cost methods typically place the cost of incarceration per inmate in Philadelphia in the \$30,000 to \$40,000 range. As noted above, estimating recidivism reduction cost savings using these average costs would significantly overstate actual savings. The only context in which using such high per inmate incarceration cost estimates would be justified is in the case of paying other facilities to house inmates due to overcrowding. It costs the City on average \$100 per day to house an inmate at another facility outside of the Philadelphia prison system.²³ Given this per diem expense, shipping one less inmate to another facility would represent an annual savings of \$36,500. In the case of prison overcapacity in Philadelphia, 100 fewer inmates could save \$3,650,000 in annual direct payments to other facilities.24

The Pew Charitable Trusts' Philadelphia Research Initiative estimates that adding a new inmate to Philadelphia's prison system costs \$20 for the first day including clothing

²¹ Ibid. States are used for marginal cost per arrest comparisons due the lack of rigorous marginal cost analyses currently available for cities.

²² States are used for marginal court processing cost comparisons due the lack of rigorous marginal cost analyses currently available for cities.

²³ Interview with City of Philadelphia Director of Criminal Justice Population Management Chip Junod, May 24, 2011.

²⁴ The extent to which the City sends prisoners to other facilities – if at all – varies. As of May 2011, Philadelphia Prisons sent five inmates to a facility in Lehigh County and another 314 to other facilities managed by private firms.

and diagnostics intake and that subsequent daily variable costs are closer to \$7 for food, pharmacy, and lab work (Pew Charitable Trusts 2010b). These daily cost estimates would rise significantly for inmates with more serious medical or mental health needs and do not include marginal costs for prison staff. Using a similar method, the Pennsylvania Department of Corrections reports an estimated variable cost of \$12 per inmate day (Pennsylvania Legislative Budget and Finance Committee 2007). With these marginal cost estimates, annual direct cost savings from incarcerating one less inmate would range between \$2,500 and \$4,400 - approximately one-tenth of the savings implied by using an incarceration cost per inmate figure based on total corrections budgets.

Another approach for considering corrections savings is to look at potential staffing cost savings due to inmate population reductions. Philadelphia prisons are currently staffed at a ratio of approximately one corrections officer per four inmates.²⁵ Bureau of Labor Statistics salary data indicates that the average corrections officer salary in Philadelphia in 2010 was \$48,910. Adding 30 percent for fringe benefits, average total compensation for a corrections officer is \$63,583. In theory, reducing the inmate population by 100 would require 25 fewer corrections officers on staff, resulting in an annual cost or productivity savings equivalent of \$1,589,600. While it is possible that such a drop in inmate population would not actually result in fewer corrections officers or a lower prisons budget, the estimate still represents an economic benefit for current corrections staff that frees up resources for prison functions.

Aside from the case of prison overcrowding leading to sending inmates to other facilities, major corrections cost savings due to reduced recidivism can only be achieved if either a prison is closed or if the cost of building a new prison is avoided (Pew Charitable Trusts 2011b). Either result would require a significant drop in number of inmates. According to City prison officials, Philadelphia could close its House of Corrections facility if the inmate population fell by 1,500. Closure of this facility would represent annual savings of up to \$24 million if all related staff, operating, and facilities costs were taken off of the books and staff were not reassigned within the prison system or elsewhere in the government.²⁶

Probation and Parole Cost Savings

A similar technique as used above for corrections officers is used to estimate marginal cost savings associated with decreased probation officer staffing due to reduced recidivism. The current average caseload per probation or parole officer in Philadelphia is approximately 160 individuals (Philadelphia Adult Probation and Parole Department 2009). Bureau of Labor Statistics salary data indicates that the average probation officer salary in Philadelphia in 2010 was \$52,180. Adding 30 percent for fringe benefits, average total compensation for a corrections officer is \$67,834. In theory, assuming that current caseload staffing ratios are maintained, reducing the inmate population by 160 would require one fewer corrections officer on staff, resulting in an annual cost or productivity savings equivalent of \$68,000.

It is important, however, to note that these theoretical probation and parole cost savings may be very hard to realize – even more so than in the case of the corrections officer

²⁵ Interview with Junod, May 24, 2011.

²⁶ Interview with Philadelphia Prison System Deputy Warden Marco Giannetta, May 26, 2011. This estimate takes into account the 400 inmates currently in overcrowded triple-bedding conditions in Philadelphia prisons in addition to the 1,150 total beds at the House of Corrections.

estimate – in part due to probation officers' much higher and fluctuating caseload levels. Historically, the City's Adult Probation and Parole Department staffing levels have remained relatively fixed even amid sharp rises or declines in number of supervision cases.²⁷ In the case of inmate population decreases resulting from early release, probation and parole officer caseloads actually could go up.

Total Cost Savings

While additional criminal justice agency budget data and analysis could produce further recidivism reduction cost savings estimates, the estimates provided above yield a baseline set of defensible savings approximations. Additional resources could lead to an expanded set of cost estimates based on local data per current leading research (Aos, Miller and Drake 2006; Henrichson and Levshin 2011a; Cowell, Lattimore and Roman 2009).

Table 5 displays estimated cost savings associated with different levels of recidivism reduction. Employment leading to one less recidivist is estimated to result in \$4,500 in annual cost savings across criminal justice agencies. The largest portion of these savings for one fewer recidivist would be due to the elimination of marginal food, clothing, and pharmacy costs while incarcerated.²⁸

This annual savings estimate would rise to \$37,600 if it is assumed that the marginal inmate would have been sent to a facility outside of the Philadelphia prison system.

These individual estimates do not include any

cost savings due to corrections or probation staff reductions because one fewer inmate would not result in a staffing adjustment. However, at the level of 100 fewer recidivists, it is assumed that there would be reductions in corrections staff, leading to a total cost savings across agencies of \$2,045,000.

Major cost savings are achieved once inmate populations are reduced enough to allow for closure of a prison facility. According to City prison officials, reducing the inmate population by 1,500 would allow for closure of the House of Corrections, which costs approximately \$24 million per year to operate. It is assumed that this scale of decrease in number of recidivists would also be large enough to bring about a reduction in probation officer staff conducting post-release supervision, resulting in a total cost savings across agencies of \$26,286,000.

In sum, this analysis indicates that, unless overcrowding has led to inmates being sent to other prison facilities, taxpayer cost savings associated with one fewer recidivist are minimal, become more substantial at scale, and rise significantly when prison rolls decrease enough to close a facility.

²⁷ Interview with Philadelphia Adult Probation and Parole Department Director of Research Ellen Kurtz, May 17, 2011.

²⁸ The \$3,450 estimate for annual direct costs per inmate represents an average of the \$7 and \$12 per diem estimates from Pew Charitable Trusts 2010b and Pennsylvania Legislative Budget and Finance Committee 2007.

TABLE 5
Estimated Annual Cost Savings Due to Recidivism Reductions in Philadelphia

Agency Function	Cost Savings Per 1 Fewer Recidivist	Cost Savings Per 100 Fewer Recidivists	Cost Savings Per 1,500 Fewer Recidivists
Arrest	\$400	\$40,000	\$600,000
Court processing	\$700	\$70,000	\$1,050,000
Corrections			
Philadelphia prisons			
Staff	-	\$1,589,575	-
Direct costs (e.g., food, pharmacy)	\$3,450	\$345,000	-
Facility closure	-	-	\$24,000,000
Sent to other facility	\$36,500	\$3,650,000	-
Supervision (probation, parole)	-	-	\$635,940
TOTAL SAVINGS			
Philadelphia inmates	\$4,550	\$2,044,575	\$26,285,940
Inmates sent to other facilities	\$37,600	\$3,760,000	-

Source: Economy League estimates

CONCLUSION

Analysis of the economic and fiscal benefits of employing the previously incarcerated in Philadelphia underscores the primary importance of human capital investments in successfully connecting former inmates to jobs. Given the education and skill levels that offenders possess upon incarceration and the wage discount associated with having a record, these investments are necessary if the earnings, fiscal, and cost savings benefits estimated in this report are to be realized.

While this report does not provide a scan of current former inmate employment efforts or evaluate program effectiveness, some general policy recommendations do emerge for consideration in improving employment outcomes for the formerly incarcerated moving forward.

1) Prioritize Education in Conjunction with Employment Programs and Other Services

The estimates provided in this study suggest that education investments can make a significant difference in earnings and overall employment prospects for previously incarcerated individuals. Research has indicated that completion of educational programs in prison can lead to lower recidivism, as Harer (1994) found that inmates who completed at least one training program per each six months of their prison term recidivated at a rate of 36 percent compared to 44 percent for those who did not complete any courses. Increasing educational

attainment can help reduce incarceration by raising both the returns to work for former inmates as well as the opportunity costs of illegal behavior (Ewert and Wildhagen 2011).

However, only about 10 percent of all US inmates attend educational, vocational or treatment programs on a given day (Pew Charitable Trusts 2010a), underscoring the need to expand and bring to scale proven education and job training programs. With prisons typically taking up more than 85 percent of corrections budgets²⁹, limited resources often remain for other programs and interventions. Only 2 percent of Pennsylvania's Department of Corrections budget, or \$44 million, is allocated for education and training programs (Dean 2011). With these resource constraints, more states are employing earned time credits for completion of educational, vocational, or other programs that increase the chances of successful reentry and employment for former inmates (Lawrence 2009).

Some research has found that behavioral and cognitive treatments produce larger effects for inmate populations on average than education, vocational, or prison labor programs. These findings correspond with the significant proportion of the inmate population with medical and mental health issues and imply that in many circumstances these issues should be addressed first before seeking to train individuals for work (Freeman 2003). As motivation has been identified as a key success factor for job market success for the previously incarcerated (Buck 2000), programs that address motivational issues, such as therapeutic models, faith-based initiatives, and family engagement also can help improve employment outcomes (Bloom 2006).

Education and employment programs for former inmates need to be integrated with other in-prison and follow-up programs, including drug treatment, health care, and housing supports, for continuity of services (Western 2007). Many of these crucial post-release supports rely heavily upon state funding and programs.

2) Focus Regionally on Industries and Occupations Most Likely to Hire the Formerly Incarcerated

The low education and skill levels of the previously incarcerated population in Philadelphia combined with slow local economic growth limits employment opportunities for former inmates. In a city that already has a large low-skilled and underemployed population without a record, formerly incarcerated individuals face significant challenges in connecting to jobs. These labor market supply and demand challenges require a clear focus on the types of industries and occupations that offer the best opportunities for former inmate employment. Historically, some of the industries most willing to hire previously incarcerated individuals have been construction, food service, wholesale, maintenance/repair, and manufacturing. Outreach by RISE and former inmate employment program providers to employers by target industry and occupation will yield more opportunities for the previously incarcerated given the considerable barriers to employment that exist for them.³⁰ It also will help to avoid the creation of former inmate job training programs that are not linked to specific available jobs.

²⁹ Right on Crime website - http://www.rightoncrime.com/the-criminal-justice-challenge/whats-gone-wrong.

³⁰ Recent research by Blumstein and Nakamura focuses on the "redemption point" for former inmate employment, or the number of years post-release at which the risk of a former inmate committing a crime is no longer any greater than for the general labor pool (Ritter 2009). Such research is intended to help make employers more likely to hire previously incarcerated individuals.

With three-quarters of the region's jobs existing outside of the City of Philadelphia, maximizing employment opportunities for the formerly incarcerated requires a regional approach to employer engagement and transportation access to jobs. The need for RISE and former inmate employment program providers to build relationships with suburban employers is exacerbated by the high concentration of low-skilled labor living in Philadelphia competing for the same limited number of available positions.

3) Increase Utilization of the PREP Tax Credit

In 2010, City Council made revisions to the PREP tax credit to increase its utilization by employers. While the changes boosted the number of employers signed on, usage has been extremely low. As indicated by the analysis above, part of the reason for this may be the significant gap between expected compensation for former inmates at low educational attainment and skill levels and the qualifying wage threshold for the tax credit.

The most desirable and impactful way to narrow this gap and increase usage of the PREP tax credit would be to invest in education and job training for former inmates to improve their overall standing and earnings potential in the local labor market.

4) Make Work Pay for the Formerly Incarcerated

Another focus of reentry policy recommendations in recent years has been on increasing the economic incentives for the formerly incarcerated to pursue legitimate employment (McLean and Thomson 2007, Pew Charitable Trusts 2010a, Holzer et al 2003, Bloom 2006). Court-ordered fines and fees, victim restitution, child support, and unpaid

debts can reduce the earnings that go into a working former inmate's pocket enough to encourage consideration of work in the secondary market or additional crimes. Financial liens and garnishments, when combined with regular taxation, can impose effective tax rates as high as 65 percent (Pew Charitable Trusts 2010a), detracting from the rewards of working for a living. For many, child support payments add considerably to post-release financial challenges, with as much as 65 percent of take-home pay subject to garnishment.

One way to reorient incentives for the previously incarcerated would be to limit the percentage of income that can be subject to deductions for unpaid debts and to spread these financial obligations out over time to make working in the short run more desirable. Others have suggested earning supplements, community service credits, transitional work program subsidies, or other work incentives to encourage formerly incarcerated individuals to seek employment at the low wage levels offered by employers (Kleykamp et al 2008, Western 2008). At the individual level, financial literacy training for former inmates can help them better manage the economic challenges and obligations they face postrelease.

5) Evaluate Program Effectiveness

Efforts to rigorously evaluate the effectiveness of former inmate reentry programs have been increasing (Aos et al 2006, Bloom 2006, Cowell et al 2009, Roman et al 2010) at the same time as sharp growth in the number and scope of these programs. To ensure that efforts to connect the formerly incarcerated with employment yield results, there is a need both to increase practitioners' understanding of the expanding criminal justice research evaluation literature (Petersilia 2004) and to foster more local study of effective

investments.³¹ Toward the latter end, significant research resources and partnership opportunities exist at area universities such as Temple, Drexel, Penn, Villanova, Widener, and LaSalle that have criminal justice and labor economics expertise.

In focusing on more rigorous evaluation of local programs for the formerly incarcerated, it is important to make sure that the right outcomes are being evaluated. Many organizations engaged in former inmate employment are evaluated primarily by the number of placements in jobs, whereas gauging job retention may prove even more important in achieving the overarching goal of reducing recidivism.

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³¹ To date, the most comprehensive look at criminal justice program effectiveness has been the ongoing evaluation work of the Washington State Institute for Public Policy. While this research focuses on evidence-based criminal justice policy options for Washington State, it draws upon a comprehensive meta-analysis of more than 570 rigorous program evaluations conducted over the past 40 years in the US and other English-speaking countries. Among the most promising interventions shown to result in recidivism reductions while yielding positive returns on taxpayer investment include cognitive behavioral therapy; substance abuse treatment; drug and mental health courts; transitional services; and adult basic education, secondary education, and vocational training (Aos et al 2006).

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